Appl. No. 09/982,544 Amdt. date July 9, 2004

PATENT

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims:

1 1. (Currently amended) A dispersible dry powder for pulmonary delivery 2 consisting essentially of comprising a therapeutically effective amount of a therapeutic agent 3 dispersed throughout in aerogel particles which are soluble in human pulmonary surfactant 4 wherein said particles have a density and particle size to permit them to reach the 5 alveoli of a human subject's lungs upon inhalation. 1 2-16. (canceled) 1 17. (new) The powder of claim 1 wherein said particles deliver said agent 2 into the bloodstream of said subject. 1 18. (New) The powder of claim 1, wherein the aerogel particle is prepared 2 from an aerogel prepared by supercritical drying at a temperature of less than 40°C. 1 19. (New) The powder of claim 1, wherein the aerogel particle contains pores 2 of about 1 to 100 nm. 1 20. (New) The powder of claim 1, wherein the aerogel particle has a surface 2 area of about 100 to $1,200 \text{ m}^2/\text{g}$. 1 21. (New) The powder of claim 1, wherein the aerogel particle has a density 2 of about 0.1 to 0.001 g/cc. 1 The powder of claim 1, wherein the aerogel particle has a particle 22. (New) 2 size of about submicron up to about 3 microns. 1 23. (New) The powder of claim 1, wherein the aerogel particle is a carrier 2 selected from the group consisting of sugars and carbohydrates.

2

3

1

1

33. (New)

34. (New)

1		24. (New)	The powder of claim 1, prepared by co-gelling the therapeutic		
2	agent with a gel-forming material selected from the group consisting of sugars and				
3	carbohydrates.				
1		25 (Nov.)	The marriage of claim 1 meanaged by the stone of (i) meanaging		
1		25. (New)	The powder of claim 1, prepared by the steps of (i) preparing		
2	porous gels of a carrier material which is soluble in pulmonary surfactant; (ii) soaking the porous				
3	gels in a solution of the therapeutic agent; (iii) removing the solvent and forming aerogels by				
4	supercritical drying; and (iv) converting the aerogels into powder.				
1		26. (New)	The powder of claim 1, wherein the therapeutic agent is insulin.		
1		27. (New)	The powder of claim 1, wherein the therapeutic agent is		
2	methadone.				
1		28. (New)	The powder of claim 1, wherein the therapeutic agent is		
2	naltrexone.				
1	·	29. (New)	A method of treating a disease state responsive to treatment by a		
2	therapeutic agent comprising pulmonarily administering to a subject in need thereof a dispersible				
3	dry powder according to claim 1.				
1		30. (New)	The method of claim 29, wherein the powder is prepared from an		
2	aerogel prepared by supercritical drying at a temperature of less than 40°C.				
1		31. (New)	The method of claim 30, wherein the powder is prepared from an		
2	aerogel prepared by co-gelling the therapeutic agent with a gel-forming material selected from				
3	the group consisting of sugars and carbohydrates.				
	0 1		•		
1		32. (New)	A method of preparing a dry powder according to claim 1, said		

method comprising converting an aerogel comprising said therapeutic agent into particles having

A composition comprising the powder of claim 1.

The composition of claim 33 further comprising a dispersant.

a particle size permitting them to reach the alveoli of a subject's lungs upon inhalation.

1	1 35. (New) The composition	of claim 34 wherein said dispersant is a			
2	2 chlorofluoro compound.				
1	1 36. (New) A method of del	ivering a therapeutic agent to a subject, said			
2	method comprising administering to said subject a dispersible dry powder according to claim 1				
3	3 as an inhalant.				
1	1 37. (New) A method of del	ivering a therapeutic agent to the bloodstream of a			
2	subject, said method comprising administering to said subject a dispersible dry powder according				
3	3 to claim 1 as an inhalant.	•			
1	1 38. (New) A method of del	ivering a therapeutic agent to a subject, said			
2	method comprising administering to said subject a composition according to claim 33 as an				
3	3 inhalant.				
1	1 39. (New) The powder of c	laim 1 wherein said agent is adsorbed onto the			
2	2 structure of said particles.				
1	1 40. (New) The powder of c	laim 1 wherein said particles are directly prepared			
2	from said therapeutic agent.				
1	1 41. (New) The powder of c	laim 1 wherein the structure of said particles			
2	comprise said therapeutic agent.				
1	1 42. (New) The powder of c	laim 1 wherein said powder is formulated for			
2	quick introduction into the bloodstream and controlled release thereafter.				
1	1 43. (New) The powder of c	laim 1 wherein the powder is formulated for slow			
2	2 release.				

Appl. No. 09/982,544 Amdt. date July 9, 2004

alveoli of a human subject's lungs upon inhalation.

PATENT

44. (New) A dispersible dry powder for pulmonary delivery comprising a therapeutically effective amount of a therapeutic agent and aerogel particles wherein said particles have a density and particle size to permit them to reach the